



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/714,912

11/18/2003

Kenji Yoshisue

056272.52903US

4007

23911

7590

09/21/2005

CROWELL & MORING LLP  
INTELLECTUAL PROPERTY GROUP  
P.O. BOX 14300  
WASHINGTON, DC 20044-4300

EXAMINER

LOCKETT, KIMBERLY R

ART UNIT

PAPER NUMBER

2837

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/714,912

Applicant(s)

YOSHISUE ET AL.

Examiner

Kim R. Lockett

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steinway in view of Nobumasa et al.

Steinway discloses the use of an action part for a piano which is pivotally moved along with depression of a key to thereby transmit key depression energy generated depression of a key to a hammer(3), wherein the action part is formed by a thermoplastic resin molded article. Stein further discloses the use of a wippen (8) pivotally moved by being pushed up by the key depression

Steinway does not disclose the use of a piano element that is molded by a long fiber process and contains long fibers for reinforcement.

Nobumasa et al discloses the use of light weight material made from a thermoplastic resin (made from continuous long fibers for reinforcement (column 4, lines 30-35 & lines 55-65). Nobumasa et al further discloses the use of carbon fibers (column 3, lines 25-45) and the use of ABS resin (column 8, lines 5-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device as disclosed by Steinway with the long fibers as disclosed by Nobumasa et al in order to provide an action part with tone quality control.

3. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steinway in view of Nobumasa et al and. Niitsuma.

Steinway and Nobumasa et al do not disclose the specific use of a wippen characteristics as disclosed in claims 6-10.

Niitsuma discloses the use of an action part, a wippen(30) made from synthetic resin (column 12, lines 55-65). Niitsuma also discloses the use of an action part that is a wippen (830) that comprises a main body that extends in a front-rear direction, and includes a continuous front part, a rear part pivotally supported about a horizontal axis, and a central part located between the front part and the rear part, and having a vertical length larger than those of the front part and the rear part, a heel section for being pushed up by the key, said heel section with an increased thickness reinforcing portion (see figure 17) protruding downward from the central part of the main body, and being continuous with the front part and the rear part of the main body via respective transition portions having obliquely linear or curved lower surfaces, and a recess (see figure 15) formed in at least one of said main body and heel sections for reducing a weight of at least one of the main body and heel sections.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device as disclosed by Steinway with the long fibers as disclosed by Nobumasa et al and the wippen physical characteristics as disclosed by Niitsuma in order to provide an action part that is lightweight yet durable.

Art Unit: 2837

3. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

5. Papers related to this application may be submitted to Group 2800 by facsimile transmission. Papers should be faxed to Group 2800 via the PTO 2800 Fax Center at 703-872-9306.

For assistance in **Patent procedure, fees or general Patent questions** calls should be directed to the **Patents Assistance Center (PAC)** whose telephone number is **800-786-9199**. Assistance is also available on the Internet at [www.uspto.gov](http://www.uspto.gov).

Any inquiry concerning **this communication or earlier communications from the examiner** should be directed to **Kim Lockett** whose telephone number is **(703) 308-7615**, after 2/3/04 my new number will be **(571) 272-2067**. The examiner can normally be reached on Tuesday through Friday from 6:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2107.

  
**KIMBERLY LOCKETT**  
**PRIMARY EXAMINER**